

## Attitudes of Jordanian Nursing Students toward Death

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### ABSTRACT

**Background:** Although death is significantly increasing and most death cases take place in hospitals. However, nursing students are not well prepared to care for patients who are near death.

**Aim:** This study aims to assess the attitudes of Jordanian nursing students towards death in addition to examine the relationship between nursing students' attitudes towards death and their selected characteristics.

**Design:** A quantitative descriptive cross-sectional research design was used.

**Method:** 551 nursing students from two universities in Jordan participated, Death Attitude Profile–Revised (DAP-R) tool and a demographic questionnaire that was developed by the researcher, which included (type of university, age, studying year, attending educational courses and attending death situation) were used.

**Results:** Jordanian nursing students most reported attitude was neutral acceptance, additionally type of university using independent t test showed a correlation with escape acceptance with p value = 0.02, using ANOVA test for both age and studying year showed that age had a correlation with death avoidance and escape acceptance with p value = 0.03, 0.004 respectively, studying year had a correlation with fear of death, death avoidance and escape acceptance with p value = 0.02, 0.001, 0.01 respectively and attending death had a correlation with death avoidance with p value = 0.011. However, attending educational courses was analyzed using t test and the result revealed no correlation with any of the death attitude dimension.

**Conclusion:** The attitudes nursing students have towards death affect how they care for dying and end of life patients, these findings demonstrate the importance of understanding students stress when they deal with death, furthermore emphasize the importance of integrating palliative educational courses into nursing curriculum.

**Key words:** nursing students, attitudes and death.

### Introduction

As death the final destination of everyone's life cycle, it is important to provide an adequate care to those who are near death and this care is provided when cure is not possible anymore (Ali, Gameel, & Ayoub, 2010). Because caring for patients in the various clinical settings is performed by nurses, Thus, nurses are expected to be well educated and knowledgeable regarding the most recent caring aspects in all dimensions of care mainly physical and psychological ones (Bloomer, Endacott, O'connor & Cross, 2013).

Although nurses are obligated to encounter death and dying issues, evidence showed that denial of death is still common among health care providers (Buaun, Gordon & Uziely, 2010). In addition, Jordan is a Muslim country with 93% of the population following Sunni Islam (Center, 2012). Death is considered as a fact of life and not considered as an end since Muslims believe in the destiny after death and the presence of heaven and hell (Rustomji, 2012).

Consequently, healthcare providers and especially nurses have to be comfortable with death issues because the attitudes of nurses toward death can affect the care they provide (Lange, Thom & Kline, 2008).

### **Nurses' Attitudes toward Death**

Nurses often have varied emotions while encountering death that affects their care. Some of the nurses become anxious and some develop fear. For example, a study that conducted in 2013 on 28 emergency nurses and 28 palliative care nurses, revealed that 44% of the nurses showed low to moderate fear of death, 34% of them avoid death, whereas 47% accept death as an escape from life (Peters, 2013).

Nurses' characteristics may influence their attitudes toward dealing with death. These characteristic may include gender, age, religion, year of experience, level of education and past experiences with death. Regarding the effect of nurses' experiences in dealing with death and dying, Feudtner and colleagues' study (2007) revealed that more experienced and educated are the nurses, the more comfortable are they in working and talking with dying children and their families, and higher levels of

their palliative care competency (Feudtner et al., 2007).

Another study that conducted in Iran investigated attitudes towards death. Iranmanesh (2009) pointed out that nurses' attitudes towards caring for dying patients were significantly influenced by their attitudes towards death, educational level and their experience in dealing with death and caring for dying patients (Iranmanesh, 2009).

### **Abstract**

In order to examine educational courses effect in nursing school on those students who became nurses and cared for dying patients, a phenomenological study conducted by Barrere and Durkin (2013) in the United States. The aim was to explore the lived experiences of nursing graduates who had The End-of-Life Nursing Education Consortium (ELNEC) education in their nursing program and who cared for dying patients at their first year of practice. Open-ended semi structured questions were used in the interview which was tapped with a purposeful sample of 12 nurses. The 12 nurses' stories were analyzed and revealed four themes: 1) good death, were nurses apply some interventions and strategies to ease or facilitate the dying process for patients; 2) experiencing intrinsic rewards, were nurses felt happy when their work is appreciated by others; 3) learning through impressionable experiences, were nurses found ELNEC education helpful but providing end of life care needs experience more than education in order for nurses to master it; 4) maintaining a balance between providing care for dying patients and not getting emotionally too involved (Barrere, & Durkin, 2013).

To conclude, nurses confront death as they work with patients near death periods. Consequently, they either develop positive or negative attitudes towards death. This attitude is based on many factors such as years of experiences nurses have and whether or not they received educational courses in their undergraduate period. Nurses' attitudes eventually affect the quality of care they provide to patients who are dying or at their end of life period.

## Statement of the Problem

Unfortunately, caring for dying patients is poorly discussed in both nursing schools and health institutions (Ali, Gameel & Ayoub, 2010), furthermore a few studies discussed nursing students' attitudes towards death (Ali, Gameel, & Ayoub, 2010; Cevik & Kav, 2013; Fawares et al., 2021; Abu Hasheesh, Al-Sayed AboZeid, Goda El-Zaid & Alhujaili, 2014). On the other hand no available studies that assess nursing students' attitudes towards death in Jordan were found.

Despite the fact that death and dying are common in the hospital's settings, caring for dying patients is a demanding practice for nurses (Mok & Chiu, 2004). Unfortunately, nurses may not be well prepared to provide such a care. Since death and dying are both highly linked to the individuals' emotions and experiences, most of nurses relate negatively regarding death from their own personal view which consequently affect the care provided to these patients (Gama, Barbosa & Vieira, 2012; Fawares et al., 2022).

Death notifications have increased significantly according to the ministry of health in Jordan in 2009, 2010 and 2012. Total numbers of death were reported as following: 14,807, 15,754 and 17,557 death cases respectively. To conclude, nurses attitudes toward death are formed early in the undergraduate level, since these students are the future nurses, preparing these students through educational courses might influence their attitudes towards death positively and help understanding the process of death help them to care for dying patients.

## Significant of the study

As the incidence of death in hospitals are increasing across Jordanian hospitals according to the Jordan Ministry of Health (2009, 2010), it is important to consider death as an issue need to be educated by nurses. Starting by understanding the nursing students' attitudes towards death might be an important step to begin with improving the care for the terminally ill patients and their families. However, up to the researcher knowledge, no previous studies were found in the reviewed literature that investigated this issue in Jordan. Accordingly, this study came to assess the

university nursing students' attitudes toward death. The results of this study might be used to modify the nursing curricula at the universities' school of nursing to include courses or at least topics in the current courses that prepare the students to practice effectively in clinical setting where patients are near death.

## Purpose of the study

The purpose of this study is to assess the attitudes of nursing students towards death and to examine the relationship between students' attitudes towards death and their selected characteristics (type of university, age, studying year, having educational courses and attending death situations).

## Research questions

This study aims to answer the following research questions:

- What attitudes do university nursing students have towards death?
- Are there significant relationship between nursing students' attitudes towards death and their selected characteristics (type of university, age, studying year, attending educational courses and attending death)

## Definitions of the Variables

For the purpose of this study, nurses' attitude towards death was defined both conceptually and operationally.

### *Nurses' attitude toward death:*

Attitude is defined conceptually as "a disposition to respond favorably or unfavorably to an object, person, institution or event" (Ajzen, 2005, p 3). Accordingly, nursing students' attitude toward death is the favorable or unfavorable students' responses to the situation of death.

Operationally, nursing students' attitude towards death was defined within five domains: Fear of Death, Death Avoidance, Neutral Acceptance, Approach Acceptance, and Escape Acceptance. These five dimensions were measured in this study by using Death Attitude

Profile- Revised (DAP-R) 32 statements scale (Wong, Reker, & Gesser, 1994).

## Methodology

### Research design

Descriptive cross-sectional research design was used. Using quantitative research methodology ensures that results are objectively assessed and not affected by the researcher's own beliefs (Polit & Beck, 2012).

### Sample and Settings

The sample for this study included nursing students at two large selected Universities in Jordan (A University and B University). A university has 768 students, where as B university has 236 students. Furthermore B university has an elective palliative course in its curriculum unlike A university as it does not have palliative course.

### Instrument

The tool package consists of two parts. The first is a demographic sheet which was developed by the researcher to obtain the demographic characteristics of the participants which include age, studying year, attending any educational courses, and whether or not they had any previous experience dealing with death, and in case they have attended death cases they were asked to express their feelings (Appendix III). This demographic tool included type of university as a variable but it was not written since the instruments were distributed first on A university then B university each at different time. The second part is Death Attitude Profile- Revised (DAP-R) instrument which was developed by Wong, Reker and Gesser (1994). The instrument contains 32 statements related to different attitudes towards death. It has seven options Likert scale (1= strongly disagree to 7= strongly agree) and consists of five subscales: fear of death, death avoidance, approach acceptance, escape acceptance and neutral acceptance (Appendix IV) (Wong, Reker & Gesser, 1994). According to Gesser and colleagues (1988) both approach acceptance and neutral acceptance were viewed as a positive attitude, whereas escape acceptance and fear of death which represent negative view of life and consequently lead to low level of well being, were viewed as

negative attitudes (Gesser, Wong & Reker, 1988). Internal consistency of the Death Attitude Profile- Revised (DAP-R) instrument was 0.86 (Abu Hasheesh, AboZeid, El-Said & Alhujaili 2014).

### The pilot study

A pilot study was conducted on a group of nursing students (10% of the sample) which was represented by 90 students from A University. Analyzing the data using Cronbach's Alpha showed internal consistency of 0.86. This result was acceptable (DeVellis, 2012).

### Ethical Consideration

The approval of the Scientific Research Committee and the Ethical Research Committee at the School of Nursing in the University of Jordan was obtained. Additionally, permission and approval of using and adapting the instruments (Appendix V) from the author was also obtained.

Each participant was handed an information sheet explaining the aims, significance of the study, the voluntary nature of participation, the right to withdraw from the study at any time, and the right to ask questions and get clarifications (Appendix II).

### Data Analysis

In order to analyze the data, Statistical Package for Social Sciences SPSS (version 19.0), was used after entering and coding the questionnaires. Descriptive statistics such as frequencies, percentages and means were used to describe sample characteristics. Means and standard deviations used to answer first research question that ask about attitudes of nursing students towards death also the mean for each of the five dimensions in the Death Attitude Profile-Revised (DAP-R) instrument was calculated independently. Regarding the second research question ANOVA sample test was used to explore the relationship between the attitudes' mean in each dimension and the demographic characteristics of age and the year of study. Additionally, independent sample t test was used to examine the relationship between attitudes' mean in each dimension and the nursing students' characteristics including the university, educational courses and whether or not the

student attended death cases, p value was set ( $P \leq 0.05$ ). The results of the study were illustrated using texts and tables.

The open ended question in the demographic data was analyzed qualitatively using manifest content analysis and five themes were emerged (Hsieh & Shannon, 2005).

## Results

### Characteristics of the Participants

A total of 600 questionnaires were distributed to nursing students at the two selected universities. A total of 551 questionnaires were returned, 385 participants from “A” University and 166 participants from “B” University, for both universities the response rate was 91.8% .

The age of the participants range from 17 – 40 years, with a mean age of 21.2 (SD = 2.8). The students who were in their last year of study represented 35.4% (N=195). Students who had educational courses in palliative care represented 30.6 % (N=170), whereas those who attended death represented 43.4% (N=239). On the other hand, in both universities, the higher percent were recorded for the participants who did not have educational courses 381 (69.1%) nor attended death situation 312 (56.6%). Table 1 shows further details of the participants’ characteristics. Regarding the missing data they were not replaced, the missing data were recorded as 99 since the researcher used the mean to report the results, there was no need to replace them.

**Table 1 Numbers and Percentages of Participants’ Characteristics (N=551)**

Variable	Number (Percentage)		Total
Number of Participants	A University	B University	551 (100%)
	385(69.9%)	166(30.1%)	
Age			
0-20	197(51.0%)	041(24.7%)	238 (43.2%)
21-23	165(42.9%)	072(43.4%)	237 (43.0%)
24-26	019(4.9%)	027(16.3%)	046 (8.3%)
27-30	004(1.0%)	018(10.8%)	022 (4.0%)
31-100	----	008(4.8%)	008 (4.8%)
Year of Studying			
First year	088(22.9%)	030(18.1%)	118 (21.4%)
Second year	065(16.9%)	035(21.1%)	100 (18.1%)
Third year	085(22.1%)	053(31.9%)	138 (25.0%)
Fourth year	147(38.2%)	048(28.9%)	195 (35.4%)
Attending Educational Courses			
Yes	108(28.1%)	062(37.3%)	170 (30.9%)
No	277(71.9%)	104(62.7%)	381 (69.1%)
Death attendance			
Yes	159(41.3%)	080(48.2%)	239 (43.4%)
No	226(58.7%)	086(51.8%)	312 (56.6%)

### The Nursing Students' Attitudes towards Death

To answer the first study question "What attitudes does university nursing students have towards death?" the means and standard deviations for each of the five dimensions in the Death Attitude Profile-Revised (DAP-R) instrument were calculated independently. Then the mean was normalized, which means

that it was converted to a percent out of 100. The results revealed that the higher mean scores of the students' attitudes towards death were for the neutral acceptance and approach acceptance domains 81.07(10.71) and 79.56(12.08) respectively which are positive attitudes. Whereas the lower mean scores were for the death avoidance and escape acceptance domains 63.66(20.49) and 64.92(19.71) respectively. See table 2.

**Table 2: The Nursing Students' Attitudes towards Death in the selected universities (N=551)**

Attitudes toward Death	Mean (SD)	Range
Neutral acceptance	81.07(10.71)	22.86-100
Approach acceptance	79.56 (12.08)	28.57-100
Fear of death	69.26(16.42)	20.41-100
Escape acceptance	64.92(19.71)	14.29-100
Death avoidance	63.66(20.49)	14.29-100

### The Relationship between Students' Attitudes and Participants' Characteristics

In order to answer the second study question "Are there significant relationship between nursing students' attitudes towards death and their selected characteristics" analyzing each participants' characteristic independently was done. Using t test the results revealed that the type of university had significant relationship with only the escape acceptance with p value = 0.02, whereas using ANOVA test showed that students' age had significant relationship with both death avoidance and escape acceptance

with p value= 0.03 and 0.004 respectively, performing post hoc showed that the significant was for senior students. Participants' studying year showed significant relationship with fear of death with p value = 0.02 death avoidance p value = 0.001 and escape acceptance with p value = 0.01 using ANOVA test, according to post hoc the significant relationship was for older students. Having educational courses showed no significant relationship with any of the five dimensions. Finally, using t test for attending death situation had only significant relationship with death avoidance with p value =0.01 as it showed in table 3.

**Table 3: Relationship between Students' Attitudes and Participants' Characteristics (N=551)**

Domains M(SD)	Type of University		Age		Year of Study		Educational Course		Attending Death	
	T-test	P value	F	P value	F	P value	T-test	P value	T-test	P value
<b>Fear of Death</b>	0.74	0.45	2.21	0.06	3.31	0.02	-1.30	0.19	1.56	0.11
Mean (SD)	69.26(16.42)									

<b>Death Avoidance</b>	0.28	0.77	2.64	0.03	5.34	0.001	-0.77	0.43	2.54	0.011
Mean (SD)	63.66(20.49)									
<b>Neutral Acceptance</b>	-1.65	0.09	1.07	0.36	0.53	0.66	-0.84	0.39	-0.97	0.33
Mean (SD)	81.07(10.71)									
<b>Approach Acceptance</b>	-1.96	0.57	0.98	0.41	1.38	0.24	-1.19	0.23	-1.82	0.06
Mean (SD)	79.56(12.08)									
<b>Escape Acceptance</b>	2.19	0.02	3.82	0.004	3.64	0.01	-1.88	0.06	1.06	0.28
Mean (SD)	64.92(19.71)									

The normalized mean score (the mean is calculated out of 100) for each dimension was used as a cut point, which means that the mean was used to determine who falls in the positive direction which was determined to be either equal or higher than the normalized mean score, which represents that the students have an attitude towards that dimension, and who

falls in the negative direction that was determined to be less than the normalized mean score, which represents that the students do not have attitude towards that dimension. Table 4 revealed the normalized mean score that was used as a cut point as it also revealed the percentage of the students that have positive and negative direction.

**Table 4: percentages of students' negative and positive attitudes towards death (N=551)**

<b>Attitudes toward Death</b>	<b>Positive (%)</b>	<b>Negative (%)</b>	<b>Mean</b>
Fear of death	55%	45%	69.26
Death avoidance	53.6%	46.4%	63.66
Neutral acceptance	52.5%	47.5%	81.07
Approach acceptance	55%	45%	79.56
Escape acceptance	55%	45%	64.92

#### **Nursing Students' Feelings after the Exposure to a Death Case**

In relation to the last question in the questionnaire were I asked students who

attended death to express their feelings, participants responses were condensed into meaning units and manifest content analysis were done by counting the occurrences of the participants' responses about their feelings after

the exposure to a death case. The data analysis emerged five main themes that represents the 204 participants' responses (table 5). The majority of students reported being sad and afraid as the most expressed feelings 104 (50.9%) and 45 (22%) respectively, 38 (18.6%) of the students who reported sad received educational courses whereas 66 (32.3%) did not receive educational courses, students who reported being afraid 10 (4.9%) of them received educational courses comparing to 35 (17.1%) who did not receive educational courses, some students reported feeling

depressed and shocked, those students represents 23 (11.2%), 7 (3.4%) of them had educational courses were 16 (7.8%) did not have educational courses. 19 students which represents (9.3%) could not express their feelings, 8(3.9%) had educational courses and 11(5.3%) did not have educational courses. Finally, 17 students (8.3%) expressed their feelings after attending death situation as being normal, 7(3.4%) of them received educational courses and 10 (4.9%) did not have educational courses.

**Table 5: Participants Feelings towards Death (N=204)**

<b>Code</b>	<b>N (%)*</b>	<b>Attending educational courses N (%)</b>
<b>Death makes me feel afraid</b>	45(22%)	Yes=10 (4.9%) No=35 (17.1%)
<b>Death makes me feel sad</b>	104 (50.9%)	Yes=38(18.6%) No=66(32.3%)
<b>Death is a normal event</b>	17(8.3%)	Yes=7 (3.4%) No=10(4.9%)
<b>Death makes feel shocked and depressed</b>	23 (11.2%)	Yes=7 (3.4%) No=16(7.8%)
<b>Death have on impact me that I can't describe</b>	19 (9.3%)	Yes=8 (3.9%) No=11 (5.3%)

\* non exclusive which means one student may have more than one response



## Discussion

### The Nursing Students' Attitudes towards Death

The results of this study revealed that the higher mean scores of the students' attitudes toward death were for the neutral acceptance and approach acceptance domains. Neutral acceptance means that the nursing students do not fear nor welcome death; they rather view death in neutral way. Students also viewed death as an entry to the happy afterlife (approach acceptance). The possible explanation of our results is that most of population in Jordan are Muslim and those include the sample of this study. In the Islamic culture, death is considered as a natural process in the person's life and death is not the end. Muslims believe that there is a life after death and if a person did good things in his life, God "Allah" will prize her/him with heaven (Rustomji, 2012; Fawares et al., 2020).

The results of our study revealed that the lower mean scores were for the death avoidance and escape acceptance domains. This means that most of the participants do not avoid to discuss death and somehow willing to talk about it. As discussed above, the possible explanation of the finding could be related to a religious perspective of death and the meaning of death among participants. In the Jordanian culture, people are thought to believe that death should be discussed and not avoided. Muslim families try to raise their kids in a way that there is life after death and people have to earn heaven and avoid actions that cause them to be in hell (Gatrad & Sheikh, 2002). Our nursing students and even the nurses in Jordan are raised in this environment.

### Relationship between Students' Attitudes and Participants' Characteristics

The results revealed that the type of university had significant relationship with the escape acceptance, whereas students' age had significant relationship with both death avoidance and escape acceptance. Also, participants' studying year showed significant relationship with fear of death, death avoidance and escape acceptance. In addition, attending

death situation had a significant relationship with death avoidance. However, having educational courses showed no significant relationship with any of the five dimensions.

The results indicate that although one university has a formal separate course for the palliative care, students reported escape acceptance attitude towards death. The difference between governmental universities and private universities in Jordan is that students who are registered in private universities mostly not from Jordan, this makes them away from their families which expose them to additional stress. Furthermore, being in a different culture also is a pressure. All this contributes to the difference attitudes nursing students have caused by type of university they go to. This result is supported by Dunn and colleagues study where they pointed out that students' attitudes are affected by not only social but also culture, philosophical and religious factors (Dunn, Otten & Stephens 2005).

In regard to the participants' year of study and its relationship to the attitudes towards death. The finding showed that students in the senior year avoid the topic of death, view death as an escape from life, but still have fear of death. These findings support other research results which found that more experienced nurses who work in medical-surgical and oncology floor in two hospitals in Detroit and Michigan viewed death as escape acceptance (Dunn, Otten & Stephens, 2005).

Another study that was conducted by Lange and colleagues in (2008), the results revealed that both age and nurses' experiences were factors affecting their attitudes towards death. Our study showed that nursing students mostly the senior ones scored high in the death avoidance domain which was explained by that it might be because the students were exposed to more critical cases in the late two years of their studies (Lange, Thom & Kline, 2008). Dunn and colleagues also pointed out that older nurses view death as escape acceptance (Dunn, Otten & Stephens, 2005), this result is similar to our study where older students viewed death as escape acceptance.

Finally, fear was one of the most reported feelings for senior students, this unexpected

finding is not consistent with Huang's and colleagues study that was conducted in 2010, were they revealed that less experienced students are the one who report fear (Huang, Chang, Sun & Ma, 2010), this can be explained by the fact that more critical clinical courses are condense in the last two years of our education programs

Another surprising result was that educational courses had no effect on students' attitudes towards death. This result was not expected and was not consistent with previous studies which support that taking course in palliative care prepares students for death. One of the studies was conducted by Barrere & Durkin (2013) revealed the importance of implementing End of- Life Nursing Education Consortium (ELNEC) in helping the nurses providing good death for dying patients and their families (Barrere & Durkin, 2013). Another older study conducted by Barrere, Durkin, and Ea Coursiere (2008) implemented a test for students before their first nursing course and again prior to graduation. This pretest-posttest study evaluated the effect of integrating (ELNEC) education into the baccalaureate nursing program, the result showed positive change in the student's attitudes after implementing (ELNEC) (Barrere, Durkin & Ea Coursiere , 2008) Similarly, Huang and colleagues (2010) pointed out in their study that nursing student' lack of experience and education are the main cause of their panic and fear (Huang, Chang, Sun & Ma, 2010). The fact that educational courses showed no significant relationship could be implies that we need to review the curriculum in order to see if death is covered adequately.

The result of my study can be explained by the fact that the palliative course that students had may not focus on death and the students' feelings towards it. Instead it might focus on end of life care and the caring of the dying patients mainly symptoms management. However, it is preferable to be cautious when interpreting these results since the number of students who had previous educational courses is small in comparison to the total sample. Nevertheless, it is worth to mention that nursing students who attended death cases showed death avoidance this result support the result of Huang's and colleagues were they pointed out that some students who attended

patient death reacted negatively and they avoided attending death cases again (Huang, Chang, Sun & Ma, 2010).

### **Nursing Students' Feelings after the Exposure to a Death Case**

The majority of the students who attended death reported being sad as the most expressed feeling and most of them did not have educational courses. The second most reported feeling was fear and this result is consistence with Huang and colleagues study (2010) were most of students who attended death for the first time in the clinical area reported fear, furthermore lack of experience and preparedness found to be contributing factors in this negative attitudes (Huang, Chang, Sun & Ma, 2010). Another supporting study is Ek's and colleagues study (2014) which revealed that some of students reported fear (Ek et al., 2014).

The finding of our study also supported by Cooper and Barnett's study (2005) revealed that some of the nursing students reported being sad and emotionally in pain upon witnessing patient's death, whereas other students reported being distressed and shocked (Cooper and Barnett, 2005)

### **Implications and Recommendations**

The result of this study can be applied by the integration of educational courses about palliative care and death issues in the undergraduate curriculum. On the other hand this study contributes to the body of nurses' knowledge and evidence-based literature. Furthermore, there are many recommendations emerged for future research; quantitative and qualitative in nature. Research are needed to enhance the knowledge regarding end of life care, in addition to care for dying patients and their families.

### **Limitations**

This study used a self reported questionnaire which may lead to over estimations of some items among participants. In addition, the sample in this study only included students from two universities this limits the ability to

generalize the results to a wider population of the findings.

### Summary

The results of this study revealed that most of the students' attitudes toward death were for the neutral acceptance and approach acceptance which means they do not fear nor welcome death; they rather view death in neutral way. However, the student reported lower mean scores for the death avoidance and escape acceptance domains which mean that they do not avoid to discuss death and somehow willing to talk about it. These finding could be related to a religious perspective of death and the meaning of death among the participants who are influence by the nature of the Jordanian culture.

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### REFERENCES

- [1] Abu Hasheesh, M. O., Al-Sayed AboZeid, S., Goda El-Zaid, S., & Alhujaili, A. D. (2014). **Nurses' characteristics and their attitudes toward death and caring for dying patients in a public hospital in Jordan.**
- [2] Ali, M., Gameel, W., & Ayoub, N. (2010). **Nurses' attitudes toward caring for dying patient in Mansoura University hospitals.** *Journal of Medicine & Biomedical Sciences*, (2).
- [3] Ajzen, I. (2005). **Attitudes, personality and behaviour.** McGraw-Hill International.
- [4] Arantzamendi, M., Addington-Hall, J., Saracibar, M., & Richardson, A. (2012). Spanish nurses' preparedness to care for hospitalised terminally ill patients and their daily approach to caring. **International journal of palliative nursing**, 18(12), 597-605.
- [5] Bagheri, A. (2007). **Individual choice in the definition of death.** *Journal of medical ethics*, 33(3), 146-149.
- [6] Baig, U. I., Bhadbhade, B. J., & Watve, M. G. (2014). **Evolution of aging and death: what insights bacteria can provide.** *The Quarterly review of biology*, 89(3), 209-233.
- [7] Barrere, C., & Durkin, A. (2013). Finding the right words: the experience of new nurses after ELNEC education integration into a BSN curriculum. *Medical-Surgical Nurses*, 23(1), 35-43.
- [8] Barrere, C. C., Durkin, A., & LaCoursiere, S. (2008). The influence of end-of-life education on attitudes of nursing students. **International Journal of Nursing Education Scholarship**, 5(1), 1-18.
- [9] Bloomer, M. J., Endacott, R., O'Connor, M., & Cross, W. (2013). The 'dis-ease' of dying: Challenges in nursing care of the dying in the acute hospital setting. A qualitative observational study. **Palliative medicine**, 27(8), 757-764.
- [10] Braun, M., Gordon, D., & Uziely, B. (2010, January). Associations between oncology nurses' attitudes toward death and caring for dying patients. In *Oncology nursing forum* (Vol. 37, No. 1, pp. E43-E49). **Oncology Nursing Society.**
- [11] Center, P. (2012). The World's Muslims: Unity and Diversity. Retrieved online from [www.pewforum.org/2012/08/09/the-worlds-musl](http://www.pewforum.org/2012/08/09/the-worlds-musl).
- [12] Cevik, B., & Kav, S. (2013). Attitudes and experiences of nurses toward death and caring for dying patients in Turkey. **Cancer nursing**, 36(6), E58-E65.
- [13] Cooper, J., & Barnett, M. (2005). Aspects of caring for dying patients which cause anxiety to first year student nurses. **International Journal of Palliative Nursing**, 11(8).
- [14] DeVellis, R. F. (2012). **Scale development.** Theory and applications (Vol. 26). Sage publications.
- [15] Dunn, K. S., Otten, C., & Stephens, E. (2005, January). Nursing experience and the care of dying patients. In *Oncology nursing forum* (Vol. 32, No. 1, pp. 97-104). **Oncology Nursing Society.**
- [16] Eagly, A. H., & Chaiken, S. (1993). **The social psychology of attitudes.** Ft. Worth, TX: Harcourt Brace Jovanovich.

- [17] Ek, K., Westin, L., Prah, C., Österlind, J., Strang, S., Bergh, I., ... & Hammarlund, K. (2014). Death and caring for dying patients: exploring first-year nursing students' descriptive experiences. **International journal of palliative nursing**, *20*(10), 509-515.
- [18] Fawares, F., Ibdah, R., Ammar, K., Alkhoulli, L., Khader, H., Muhareb, H., ... & Abu-Shanab, S. (2021). Spiritual beliefs of Jordanian adult patients receiving palliative care. **Journal of religion and health**, *60*(4), 2849-2861.
- [19] Fawares, F., Ammar, K., Farhan, M., Nour, S., & Atmah, R. (2021). New nurses' Perceptions of Their Experiences during Their First Year of Practice in Oncology Setting. **Journal of Medical and Health Studies**, *2*(1), 01-08.
- [20] Fawaris, F., Othman, E. H., AlBashtawy, M., & Alfawares, A. A. (2022). The Psychological Impact of the COVID-19 Pandemic on Jordanian Healthcare Workers. **International Journal of Reliable and Quality E-Healthcare (IJRQEH)**, *11*(3), 1-9.
- [21] Feudtner, C., Santucci, G., Feinstein, J. A., Snyder, C. R., Rourke, M. T., & Kang, T. I. (2007). **Hopeful thinking and level of comfort regarding providing pediatric palliative care: a survey of hospital nurses**. *Pediatrics*, *119*(1), e186-e192.
- [22] Gama, G., Vieira, M., & Barbosa, F. (2012). Factors influencing nurses' attitudes toward death. **International journal of palliative nursing**, *18*(6), 267-273.
- [23] Gatrad, R., & Sheikh, A. (2002). Palliative care for Muslims and issues after death. **International journal of palliative nursing**, *8*(12), 594-597.
- [24] Gerritsen, R. T., Hofhuis, J. G., Koopmans, M., van der Woude, M., Bormans, L., Hovingh, A., & Spronk, P. E. (2013). **Perception by family members and ICU staff of the quality of dying and death in the ICU: a prospective multicenter study in The Netherlands**. *CHEST Journal*, *143*(2), 357-363.
- [25] Gesser, G., Wong, P. T., & Reker, G. T. (1988). Death attitudes across the life-span: The development and validation of the Death Attitude Profile (DAP). **Omega-Journal of Death and Dying**, *18*(2), 113-128.
- [26] Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. **Qualitative health research**, *15*(9), 1277-1288.
- [27] Huang, X. Y., Chang, J. Y., Sun, F. K., & Ma, W. F. (2010). Nursing students' experiences of their first encounter with death during clinical practice in Taiwan. **Journal of clinical nursing**, *19*(15-16), 2280-2290.
- [28] Hui, D., Nooruddin, Z., Didwaniya, N., Dev, R., De La Cruz, M., Kim, S. H., ... & Bruera, E. (2014). Concepts and definitions for "actively dying," "end of life," "terminally ill," "terminal care," and "transition of care": A systematic review. **Journal of pain and symptom management**, *47*(1), 77-89.
- [29] Iranmanesh, S. (2009). **Caring for dying and meeting death the views of Iranian and Swedish nurses and student nurses**. Luleå tekniska universitet,.
- [30] Iranmanesh, S., Dargahi, H., & Abbaszadeh, A. (2008). Attitudes of Iranian nurses toward caring for dying patients. **Palliative and Supportive care**, *6*(04), 363-369.
- [31] Iranmanesh, S., Savenstedt, S., & Abbaszadeh, A. (2008). Student nurses' attitudes towards death and dying in south-east Iran. **International journal of palliative nursing**, *14*(5), 214-219.
- [32] Izumi, S. S., Nagae, H., Sakurai, C., & Imamura, E. (2012). **Defining end-of-life care from perspectives of nursing ethics**. *Nursing ethics*, *19*(5), 608-618.
- [33] Khader, K. A., Jarrah, S. S., & Alasad, J. (2010). **Influence of nurses' characteristics and education on their attitudes towards death and dying: A review of literature**. *International Journal of Nursing and Midwifery*, *2*(1), 1-9.
- [34] Khalaf, I. A. (1989). **The relationship between the type of the child's death whether anticipated or unexpected and the Jordanian mother's grief responses** (Doctoral dissertation, New York University).
- [35] Lange, M., Thom, B., & Kline, N. E. (2008, November). Assessing nurses' attitudes toward death and caring for dying patients in a comprehensive cancer center. In **Oncology nursing forum** (Vol.

- 35, No. 6, pp. 955-959). Oncology Nursing Society.
- [36] Maria, M., Pavlos, S., Kiriaki, S., Tatiana, S., Kostantinia, K., Eleni, M., & Eleni, T. (2011). **Greek nurses attitudes towards death**. *Global Journal of Health Science*, 3(1), p224.
- [37] Ministry of health (2010). *Information and research for better health*. Retrieved from <http://www.moh.gov.jo/AR/Pages/Periodic-Newsletters.aspx>
- [38] Ministry of health (2012). Information and research for better health. Retrieved from [http://apps.moh.gov.jo/moh/files/publication/al%20seha%20net\\_1.pdf](http://apps.moh.gov.jo/moh/files/publication/al%20seha%20net_1.pdf)
- [39] Mok, E., & Chiu, P. C. (2004). **Nurse-patient relationships in palliative care**. *Journal of advanced Nursing*, 48(5), 475-483.
- [40] Peters, L., Cant, R., Payne, S., O'Connor, M., McDermott, F., Hood, K., ...&Shimoinaba, K. (2013). **Emergency and palliative care nurses' levels of anxiety about death and coping with death: A questionnaire survey**. *Australasian Emergency Nursing Journal*, 16(4), 152-159.
- [41] Peters, L., Cant, R., Payne, S., O'Connor, M., McDermott, F., Hood, K., ... & Shimoinaba, K. (2013). **How death anxiety impacts nurses' caring for patients at the end of life: a review of literature**. *The open nursing journal*, 7, 14.
- [42] Prieto, L. R. (2011). **Introduction to the special section on grief, loss, and bereavement**. *Journal of Mental Health Counseling*, 33(1), 1-3.
- [43] Polit, D. F., & Beck, C. T. (2012). *Nursing research: Generating and assessing evidence for nursing practice*. Lippincott Williams & Wilkins.
- [44] Rustomji, N. (2012). **The garden and the fire: heaven and hell in Islamic culture**. Columbia University Press.
- [45] Tse, D. M., Wu, K. K., Suen, M. H., Ko, F. Y., & Yung, G. L. (2006). **Perception of doctors and nurses on the care and bereavement support for relatives of terminally ill patients in an acute setting**. *Hong Kong Journal of Psychiatry*, 16(1), 7.
- [46] Wilson, J., & Kirshbaum, M. (2011). Effects of patient death on nursing staff: a literature review. **British journal of nursing**, 20(9), 559-563.
- [47] Wong, P. T., Reker, G. T., & Gesser, G. (1994). Death Attitude Profile-Revised: A multidimensional measure of attitudes toward death. **Death anxiety handbook: Research, instrumentation, and application**, 121